

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

Claim 1 (canceled)

2. (currently amended) An isolated DNA molecule having a nucleotide sequence as in SEQ ID NO: 12, wherein adenine is in nucleotide position 307 of the open reading frame instead of guanine ~~in SEQ ID NO: 12~~.

Claim 3 (canceled)

4. (previously presented) An isolated DNA molecule which is complementary to the nucleotide sequence of claim 2 or SEQ ID NO: 12.

Claim 5 (canceled)

6. (previously presented) An isolated DNA molecule according to claim 2 with a thymine in nucleotide position 229.

7. (currently amended) A fragment of the isolated DNA molecule of claim 2, said fragment including a nucleotide sequence that distinguishes *E. coli* F18 colonization resistant swine from sensitive swine.

8. (currently amended) A nucleic acid probe , whose sequence is derived from SEQ ID NO: 12, the probe capable of detecting to detect if the nucleotide at position 307 of the open reading frame of the alpha (1,2) fucosyltransferase gene 1 in swine is guanine.

9. (currently amended) A nucleic acid probe whose sequence is derived from SEQ ID NO: 12, the probe capable of detecting to detect if the nucleotide at position 307 of the open reading frame of the alpha (1,2) fucosyltransferase gene 1 in swine is adenine.

10. (canceled)

11. (currently amended) Amplified Nucleic acid fragments of swine FUT1 produced by amplification followed by restriction with restriction enzymes CfoI (A) and ACiL (B).